

## **GRK 1 (phospho Ser21) Polyclonal Antibody**

Catalog No: YP0741

**Reactivity:** Human; Mouse; Rat; Monkey

**Applications:** WB;IHC;IF;ELISA

Target: GRK1

**Fields:** >>Chemokine signaling pathway;>>Endocytosis;>>Phototransduction

Gene Name: GRK1

Protein Name: Rhodopsin kinase

Q15835

Q9WVL4

Human Gene Id: 6011

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Rat Gene ld: 81760

Rat Swiss Prot No: Q63651

Immunogen: The antiserum was produced against synthesized peptide derived from human

GRK1 around the phosphorylation site of Ser21. AA range:6-55

Specificity: Phospho-GRK 1 (S21) Polyclonal Antibody detects endogenous levels of GRK 1

protein only when phosphorylated at S21.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 63kD

**Cell Pathway:** Chemokine; Endocytosis;

**Background:** This gene encodes a member of the guanine nucleotide-binding protein (G

protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates rhodopsin and initiates its deactivation. Defects in GRK1 are known to cause Oguchi disease 2 (also known as stationary night

blindness Oguchi type-2). [provided by RefSeq, Jul 2008],

**Function :** catalytic activity:ATP + [rhodopsin] = ADP + [rhodopsin]

phosphate., disease: Defects in GRK1 are a cause of congenital stationary night blindness Oguchi type (CSNBO) [MIM:258100]; also known as Oguchi disease. Congenital stationary night blindness is a non-progressive retinal disorder

characterized by impaired night vision. CSNBO is an autosomal recessive form

associated with fundus discoloration and abnormally slow dark adaptation.,function:Phosphorylates rhodopsin thereby initiating its deactivation.,online information:Retina International's Scientific

Newsletter,PTM:Autophosphorylated.,PTM:Farnesylation is required for full activity.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 RGS

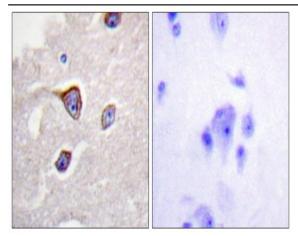
domain.,tissue specificity:R

Subcellular Location : Membrane; Lipid-anchor. Cell projection, cilium, photoreceptor outer segment.

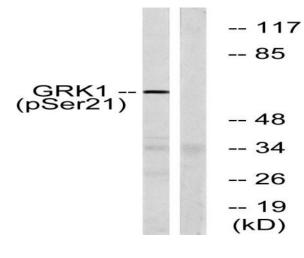
Subcellular location is not affected by light or dark conditions. .

**Expression:** Retinal-specific. Expressed in rods and cones cells.

## **Products Images**



Immunohistochemistry analysis of paraffin-embedded human brain, using GRK1 (Phospho-Ser21) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with TNF 20ng/ml 5', using GRK1 (Phospho-Ser21) Antibody. The lane on the right is blocked with the phospho peptide.